

48. (new) The adenovirus vector of Claim 36 wherein said CEA promoter is a sequence having at least 85% sequence identity to nucleotides -402 to +69 as depicted in SEQ ID NO:1, wherein said promoter component retains the ability to increase transcription of an operably linked polynucleotide.

49. (new) The adenovirus vector of Claim 36 wherein said CEA promoter is a sequence having at least 90% sequence identity to nucleotides -402 to +69 as depicted in SEQ ID NO:1, wherein said promoter component retains the ability to increase transcription of an operably linked polynucleotide.

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50. (new) The adenovirus vector of Claim 36 wherein said CEA promoter is a sequence having at least 95% sequence identity to nucleotides -402 to +69 as depicted in SEQ ID NO:1, wherein said promoter component retains the ability to increase transcription of an operably linked polynucleotide.

REMARKS

Applicants respectfully request entry of the above amendments. Claims 34, 35 and 37 are added, claims 33, 36 and 38 have been amended, and new claims 40-50 are added. No new matter is added.

Support for the amending language of Claim 33 may be found in the specification on page 27, lines 8-24. Support for new claims 48-50 may be found in the specification at page 19, lines 11-14. Support for the claim language "retains the ability to increase transcription of an operably linked polynucleotide" may be found in the specification on page 16, lines 3-5. Support for claims 43-47 may be found in the specification at page 7, lines 20-23; page 24, lines 21-25; and page 25, lines 1-17. Support for claims to a CEA promoter and enhancer may be found in the specification on page 15, line 11.

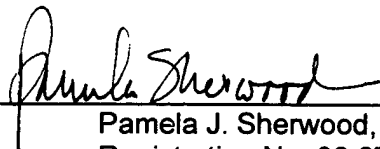
Applicants submit that all of the claims are now in condition for allowance, which action is requested. If the Examiner finds that a Telephone Conference would expedite the prosecution of this application, she is invited to telephone the undersigned at the number provided.

The Commissioner is hereby authorized to charge any other fees under 37 C.F.R. §§ 1.16 and 1.17 which may be required by this paper, or to credit any overpayment, to Deposit Account No.

50-0815, order number CELL-007CON.

Respectfully submitted,

Date: May 3, 2002

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Cancel claims 34, 35, 37.

33. (amended) A replication-competent adenovirus vector comprising [two] a first and a second adenovirus gene[s] essential for replication, wherein [each] said first adenovirus gene [of said genes] is under transcriptional control of [separate] a carcinoembryonic antigen transcription regulatory element[s] (CEA-TRE) and [wherein said CEA-TREs differ in sequence] said second adenovirus gene is under transcriptional control of a cell-specific, tissue-specific or cancer-specific heterologous transcriptional response element (TRE).

36. (amended) The adenovirus vector of claim 33 wherein [at least one] said CEA-TRE comprises a promoter that comprises a nucleotide sequence within about -402 to about +69 relative to the transcriptional start site of the CEA gene and a CEA enhancer.

38. (amended) A composition comprising the adenovirus vector of claim 33, and a pharmaceutically acceptable excipient.

39. A host cell transformed with the adenovirus vector of claim 33.

Add the following new claims:

40 (new) The adenovirus vector of Claim 33, wherein said adenovirus gene essential for replication is an early gene.

41. (new) The adenovirus vector of Claim 40, wherein said early gene is selected from the group consisting of E1A, E1B and E4.

42. (new) The adenovirus vector of Claim 33, wherein said first and said second adenovirus gene essential for replication are E1A and E1B.

43. (new) The adenovirus vector of Claim 36 wherein said CEA enhancer comprises a nucleotide sequence from about -6.1 to about -3.8 relative to the transcriptional start site of the CEA gene.

44. (new) The adenovirus vector of Claim 36 wherein said CEA enhancer comprises a nucleotide sequence from about -14.5 to about -3.8 relative to the transcriptional start site of the CEA gene.

45. (new) The adenovirus vector of Claim 36 wherein said CEA promoter comprises the nucleotide sequence as shown in SEQ ID NO:1.

46. (new) The adenovirus vector of Claim 36 wherein said CEA enhancer comprises a nucleotide sequence within the region from about -13.6 to about -10.6 relative to the transcriptional start site of the CEA gene.

47. (new) The adenovirus vector of Claim 36 wherein said CEA enhancer comprises the nucleotide sequence from about -14.5 to about -10.6 relative to the transcriptional start site of the CEA gene.

48. (new) The adenovirus vector of Claim 36 wherein said CEA promoter is a sequence having at least 85% sequence identity to nucleotides -402 to +69 as depicted in SEQ ID NO:1, wherein said promoter component retains the ability to increase transcription of an operably linked polynucleotide.

49. (new) The adenovirus vector of Claim 36 wherein said CEA promoter is a sequence having at least 90% sequence identity to nucleotides -402 to +69 as depicted in SEQ ID NO:1, wherein said promoter component retains the ability to increase transcription of an operably linked polynucleotide.

50. (new) The adenovirus vector of Claim 36 wherein said CEA promoter is a sequence having at least 95% sequence identity to nucleotides -402 to +69 as depicted in SEQ ID NO:1, wherein said promoter component retains the ability to increase transcription of an operably linked polynucleotide.